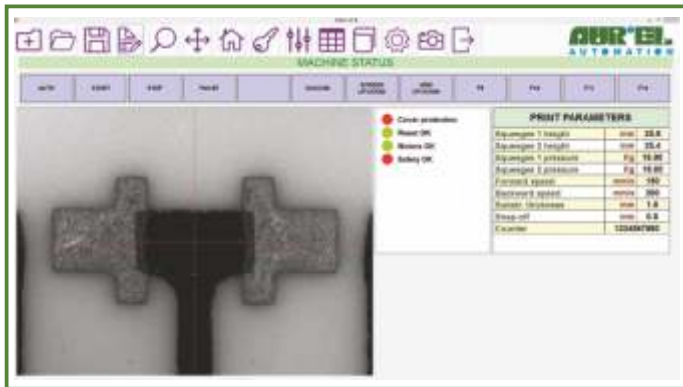# VS2025
LARGE AREA SCREEN-STENCIL PRINTER

Aurel VS2025 is a high precision screen/stencil printing machine for large area substrates, up to 800 x 600 mm. The accurate control of the printing pressure and the parallelism grants the highest deposition uniformity from corner to corner even with large area substrate. All the machine's movements are motorized and programmed by S/W. Special exchangeable fixtures are available for flexible substrates or long PCBs

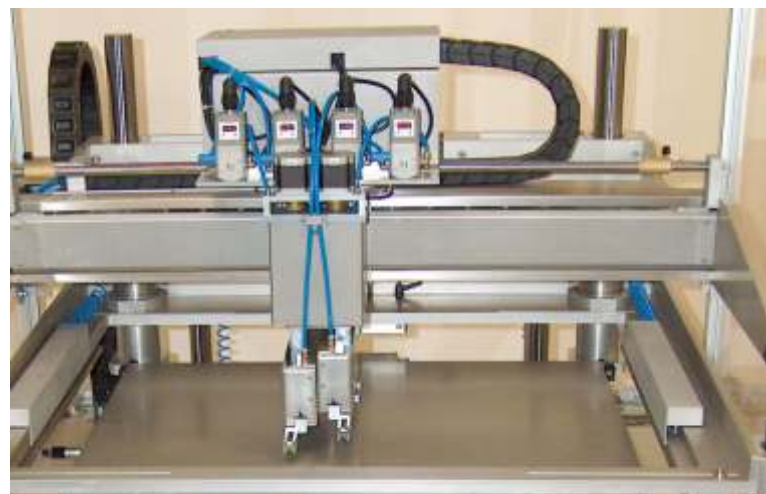USER-FRIENDLY INTERFACE WITH TOUCH SCREEN MONITOR

HEAD

- The intelligent head on high precision slides represents the latest state-of-the-art design with motorized and programmable axes for fine teaching and adjustment of parameters.

- High sensitive squeegee for fine-line printing, low pressure, constant angle, no vibration.

- DC motor driven head allows smooth movement and precise speed & stroke adjustment in both directions.

- Configurable head, single squeegee, double squeegee, squeegee and flood blade.

- Motorized and programmable screen Z axis for screen height and slow snap-off function - very important for fine line printing.

APPLICATIONS

- Thick film pastes
- Solder paste for SMT
- Glues, adhesives, resins
- Membrane switch panel
- Solder resist
- Flexible foils, PET film, paper
- Polymeric pastes
- LED Panels
- Cylindrical parts
- Glass, quartz

CONTROL SYSTEMS

- The machine is PC controlled and allows a great deal of flexibility on all functions
- Windows © Operating System
- Wide Touch screen monitor with user friendly interface
- Print and flood, alternating print and after print delay
- Programmable print parameters (printing stroke, pressure, print gap & down stop)
- Machine diagnostic
- Machine hood & lifting and locking safety switches
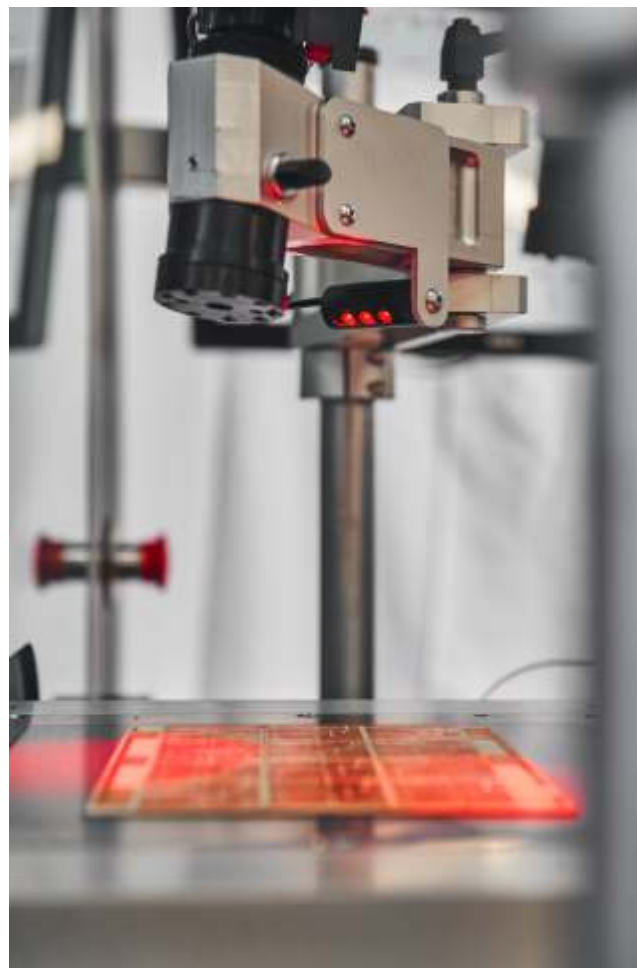- Work recipes storing and data logging

INTELLIGENT DOUBLE SQUEEGEE HEAD

VISION

- Pro Align Vision system
- Two TV cameras (resolution 640 x 430 pixels)
- Graphic overlapping of the memorized fiducials on the "life" image
- Accurate alignment by manual micrometers
  Programmable tolerance to achieve very high precision (for fine line and fine pitch)

CHARACTERISTICS

- Double squeegee head
- Automatic shuttle table
- Print and Flood, Print & Print, Print + Print
- Contact and off contact
- Printing head dc motor drive
- Programmable adjustment of the printing speed, stroke print gap and pressure
- Precision X-Y-Theta work table for accurate substrate alignment
- Substrate hold-down by vacuum
- Vacuum by Venturi ejector
- All movements on precision ball bearing linear slides

VISIBLE LIGHT AND IR LIGHT

OTHER OPTIONS

- Paste Reload Dispenser
- PHM, Programmable Holes Metallization and VIA filling
- Substrate cleaning via roller contact, air knife, ionizer bar
- Led UV LAMP
- Bar code reader
- Pneumatic screen locking
- Climatization system
- Automatic stencil cleaning (only for stencil)
- Loader/Unloader System
- Roll to roll printing

FEATURES

Max print area	790 x 600 mm
Max substrate size	840 x 640 mm
Max screen size	39" x 39"
Max squeegee width	620 mm
X-Y adjustment	± 12,5 mm
Z adjustment (screen height)	± 6 mm
Theta adjustment (rotation)	± 3°
Print stroke	30 ÷ 840 mm
Squeegee speed	0 ÷ 300 mm/sec
Squeegee pressure	0 ÷ 16 Kg (more on request)
Printing capacity	10 ÷15 sec + print time

ACCURACY

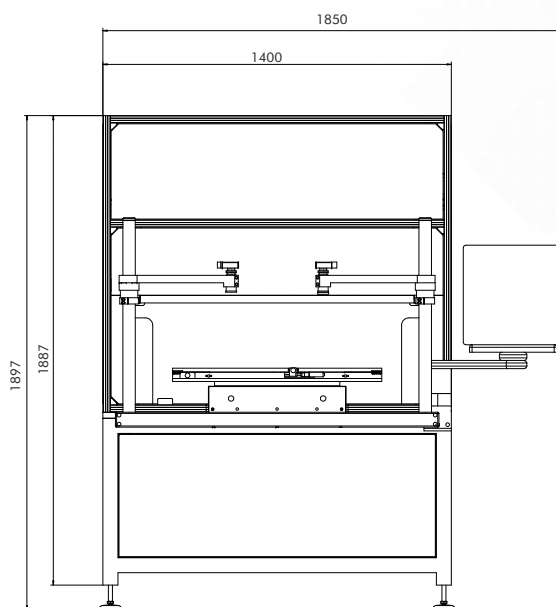|	
Carriage resoluton	0.0005 mm
Total system repeatability	± 0.020 mm
Squeegee and screen parallel	± 0.02 mm/100 mm

VISION SPECIFICATIONS

TV camera resolution	0.001 mm
Vision system repeatability	± 0.001 mm
TV camera field of view	Min. 2 x 1,5 - Max 8 x 6 mm
Fiducial dimensions	Min. 0,2 x 0,2 - Max 3 x 3 mm

DIMENSION & UTILITIES

Dimensions	2100W x 1400L x 1880H mm
Approx. weight	600 Kg
Compressed air supply	5 Ate 25 Nl/min MIN
Power Supply	400 V - 1000 W

FRONT VIEW

SIDE VIEW

CE

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